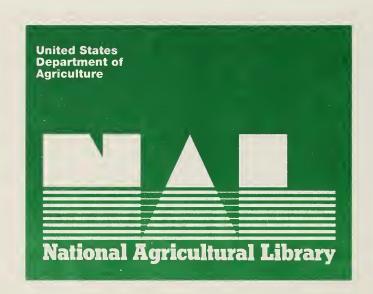
Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



aTP372 .6 .U556 1974



NATIONAL AGRICULTURAL LIBRARY

CORRECTED COPY





UNITED STATES STANDARDS

for grades of

CANNED RED TART PITTED CHERRIES

Seventh Issue

EFFECTIVE MAY 15, 1974

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

FRUIT AND VEGETABLE DIVISION

PROCESSED PRODUCTS STANDARDIZATION AND INSPECTION BRANCH

These standards supersede the standards which have been in effect since June 16, 1972

This is the seventh issue of the United States Standards for Grades of Canned Red Tart Pitted Cherries.

These standards were published in the Federal Register of February 15, 1964 (29 F.R. 2481), to become effective on June 15, 1964. Amendments to the standards were published in the Federal Register of May 17, 1972 (37 F.R. 9755), to become effective on June 16, 1972. These standards were revised effective May 15, 1974 (39 F.R. 13962).

This grade standard is issued under authority of the Agricultural Marketing Act of 1946, which provides for the issuance of official U.S. grades to designate different levels of quality for the voluntary use of producers, buyers, and consumers. Official grading service is also provided under this Act, upon request of the applicant, and upon payment of a fee to cover the cost of the service.

As is the case of other standards for processed fruits and vegetables, these standards are designed to serve as a convenient basis for sales, for establishing quality control programs, and for determining loan values. They will also serve as a basis for the inspection of this commodity by Federal inspection service, which is available for the inspection of other processed products as well.

These standards are issued by the Department after careful consideration of all data and views submitted and the Department welcomes suggestions which might aid in improving these standards in future revisions. Comments may be submitted to, and copies of these standards obtained from:

Chief, Processed Products Standardization and Inspection Branch Fruit and Vegetable Division, AMS U.S. Department of Agriculture Washington, D.C. 20250

UNITED STATES STANDARDS FOR GRADES OF CANNED RED TART PITTED CHERRIES

EFFECTIVE MAY 15, 1974

a	_	_	
•	$^{\circ}$	\boldsymbol{c}	

- 52.771 Identity.
- 52.772 Grades.
- 52.773 Liquid media and Brix measurements.
- 52.774 Fill of container.
- 52.775 Sample unit size.
- 52.776 Ascertaining the grade of a sample unit.
- 52.777 Ascertaining the rating for the factors which are scored.
- 52.778 Color.
- 52.779 Freedom from pits.
- 52.780 Defects.
- 52.781 Character.
- 52.782 Allowances for quality factors.
- 52.783 Ascertaining the grade of a lot.
- 52.784 Score sheet for canned red tart pitted cherries.

(Authority: Agricultural Marketing Act of 1946, Sec. 205, 60 Stat. 1090, as amended; 7 U.S.C. 1624).

NOTE: Compliance with the provisions of these standards shall not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or with applicable state laws and regulations.

\$52,771 IDENTITY.

"Canned red tart pitted cherries" is the product represented as defined in the standard of identity for canned cherries (21 CFR 27.30), issued pursuant to the Federal Food, Drug, and Cosmetic Act, and packed in one of the liquid media specified in \$52.773; and is sealed in a hermetically sealed container and so processed by heat as to prevent spoilage.

§52.772 GRADES.

- (a) "U.S. Grade A" (or "U.S. Fancy") is the quality of canned red tart pitted cherries that have at least the following attributes:
 - (1) reasonably good color;
 - (2) practically free from pits;
 - (3) practically free from defects;
 - (4) good character;
 - (5) normal flavor and odor; and
 - (6) score not less than 90 points when scored in accordance with the scoring system outlined in this subpart.

Canned red tart pitted cherries of this grade may contain not more than eight cherries per sample unit that are less than 9/16 inch (14 mm) in diameter.

- (b) "U.S. Grade B" (or "U.S. Choice") is the quality of canned red tart pitted cherries that have at least the following attributes:
 - (1) reasonably good color;
 - (2) reasonably free from pits;
 - (3) reasonably free from defects;
 - (4) reasonably good character;
 - (5) normal flavor and odor; and
 - (6) score not less than 80 points when scored in accordance with the scoring system outlined in this subpart.

Canned red tart pitted cherries of this grade may contain not more than 15 cherries per sample unit that are less than 9/16 inch (14 mm) in diameter.

- (c) "U.S. Grade C" (or "U.S. Standard") is the quality of canned red tart pitted cherries that have at least the following attributes:
 - (1) fairly good color;
 - (2) fairly free from pits;
 - (3) fairly free from defects;

- (4) fairly good character;
- (5) normal flavor and odor; and
- (6) score not less than 70 points when scored in accordance with the scoring system outlined in this subpart.

There is no size requirement for canned red tart pitted cherries of this grade.

(d) "Substandard" is the quality of canned red tart pitted cherries that fail to meet the requirements of "U.S. Grade C".

§52.773 LIQUID MEDIA AND BRIX MEASUREMENTS.

(a) Brix measurement requirements for the liquid media in canned red tart pitted cherries are not incorporated in the grades of the finished product since sirup, or any other liquid medium, as such, is not a factor of quality for the purpose of the grades. The designations of liquid packing media and Brix measurements, where applicable, are as follows:

Designations	Brix measurement
Water (cherry juice and water)	Not applicable.
Cherry juice	Not applicable.
Slightly sweetened water	Less than 18°.
Slightly sweetened cherry juice	Less than 18°.
Light sirup	18° or more, but less than 22°.
Light cherry juice sirup	18° or more, but less than 22° .
Heavy sirup	22° or more, but less than 28° .
Heavy cherry juice sirup	22° or more, but less than 28° .
Extra heavy sirup	28° or more, but less than 45° .
Extra heavy cherry juice sirup	28° or more, but less than 45°.

(b) The densities of the packing media, as listed in this section, arc measured on the refractometer, expressed as percent, by weight, sucrose (degree Brix) with correction for temperature to the equivalent at 20° C. $(68^{\circ}$ F.), but without correction for invert sugars or other substances. The Brix measurement of the packing media may be determined by any other method which gives equivalent results.

(c) Brix determination is made on the packing media 15 days or more after the cherries are canned or on the blended homogenized slurry of the comminuted entire contents of the container if canned for less than 15 days.

§52.774 FILL OF CONTAINER.

- (a) FDA requirements. Canned red tart pitted cherries shall meet the fill of the container requirements as set forth in the regulations of the Food and Drug Administration (21 CFR 27.32).
 - (b) Recommended minimum drained weights.
- (1) General. The minimum drained weight recommendations for the various container sizes and types of packing media as listed in Table I of this section are not incorporated in the grades of the finished product since drained weight, as such, is not a factor of quality for the purpose of these grades.
 - (2) Definitions.

Sample average-----Average of all the drained weights of the sample containers representing a lot.

 $\overline{\mathbf{X}}_{\mathbf{d}}$ -----A specified minimum sample average drained weight.

LL-----Lower limit for individual container drained weight.

- (3) Method for ascertaining drained weight. The drained weight of canned red tart pitted cherries is determined by emptying the contents of the container upon a U.S. Standard No. 8 circular sieve of proper diameter containing eight meshes to the inch $(0.0937 \text{ inch } (2.3 \text{ mm}), \pm 3 \text{ percent}, \text{ square openings})$ so as to distribute the product evenly over the sieve. Without shifting the product, incline the sieve at an angle of 17° to 20° to facilitate drainage and allow to drain for two minutes. The weight of drained cherries is the weight of the sieve and product less the weight of the dry sieve. A sieve eight inches in diameter is used for No. 3 size containers (404×414) and smaller, and a sieve 12 inches in diameter is used for containers larger than No. 3 size containers.
- (4) Compliance with recommended minimum drained weights. A lot of canned red tart pitted cherries is considered as meeting the minimum drained weight recommendations when the following criteria are met:
- (i) The sample average meets the specified minimum sample average drained weight (designated as " X_d " in Table I); and

(ii) The number of sample containers which fail to meet the minimum drained weight for individual containers (designated as "LL" in Table I) does not exceed the applicable acceptance number specified in Table II.

Table I - Recommended Minimum Drained Weights for Canned Red Tart Pitted Cherries

Container Designation	Packed or che						•	y Siru etened	p or Water
	LL		X	d	I	.L		\overline{X}_{d}	
	- Ounces -				- Ounces -				
No. 303 (303 x 406)	10.7		11.			9.9		10.2	
No. 303 Cyl. (303 x 509)	14.0		14		_	2.7		13.1	
No. 2 (307 x 409)	13.1		13.	. 5	1	2.3		12.7	
No. 10 (603 x 700)	71.2		72.	. 0	6	9.4		70.2	
Table II - Singl	e Sampl	ing	Pla	ns an	ıd Acc	eptar	nce Nu	umbers	
Sample Size (Nc. of Sampl Containers)	e	3	6	13	21	29	38	48	60
Acceptance Numbers		0	1	2	3	4	5	6	7

⁽c) Recommended fill weights.

(2) Definitions.

Subgroup ---- A group of sample containers representing a portion of a sample.

 $\overline{\mathbf{X'}}_{\min}$ ----- A specified minimum lot average fill weight.

 $LWL_{\overline{y}}$ ----- Lower warning limit for subgroup averages.

 $LRL_{\overline{y}}^{-----}$ Lower reject limit for subgroup averages.

LWL ----- Lower warning limit for individual fill weight measurements.

LRL ----- Lower reject limit for individual fill weight measurements.

⁽¹⁾ General. The minimum fill weight recommendations for the various container sizes in Table III of this section are not incorporated in the grades of the finished product since fill weight, as such, is not a factor of quality for the purpose of these grades.

R' ----- A specified average range value.

 $R_{\mbox{\scriptsize max}}$ ----- A specified maximum range for subgroups.

- (3) Method for ascertaining fill weight. The fill weight of canned red tart pitted cherries is determined in accordance with the U.S. Standards for Inspection by Variables and the U.S. Standards for Determination of Fill Weights.
- (4) Compliance with recommended fill weights. Compliance with the recommended fill weights for canned red tart pitted cherries shall be in accordance with the U.S. Standards for Inspection by Variables and the U.S. Standards for Determination of Fill Weights.

Table III - Recommended Fill Weight Values for Canned Red Tart Pitted Cherries

	Fill weight values in ounces							
Container designation	X'min	$LWL_{\overline{X}}$	LRL X	LWL	LRL	R۱	R _{max}	Sampling allowance code
No. 303	12.9	12.6	12.4	12.2	11.8	0.80	1.70	F
No. 303 Cylinder	16.8	16.4	16.2	15.9	15.4	1.10	2.20	н
No. 2	15.8	15.4	15.2	14.9	14.4	1.10	2.20	Н
No. 10	86.7	85.9	85.5	85.0	84.1	2.00	4.20	P

§52.775 SAMPLE UNIT SIZE.

Compliance with requirements for the size and the various quality factors is based on the following sample unit sizes for the applicable factor:

- (a) Size, color, pits, and character 20 ounces of drained cherries.
- (b) Defects (other than harmless extraneous material) 100 cherries.
- (c) Harmless extraneous material The total contents of each container in the sample.

§52.776 ASCERTAINING THE GRADE OF A SAMPLE UNIT.

- (a) General. The grade of a sample unit of canned red tart pitted cherries is ascertained by considering the factor of flavor and odor of the product and the requirement for size (in U.S. Grade A and U.S. Grade B) which are not scored; the ratings for the factors of color, freedom from pits, defects, and character, which are scored; and the limiting rules which may be applicable.
- (b) Factors rated by score points. The relative importance of each factor which is scored is expressed numerically on the scale of 100. The maximum number of points that may be given each factor is:

Factors:	1	Points
Color		20
Freedom from pits		20
Defects		30
Character		30_
Total score -		100

(c) Definition. "Normal flavor and odor" means that the flavor and odor are characteristic of canned red tart pitted cherries and that the product is free from objectionable flavors and objectionable odors of any kind.

§52.777 ASCERTAINING THE RATING FOR THE FACTORS WHICH ARE SCORED.

The essential variations within each factor which is scored are so described that the value may be ascertained for each factor and expressed numerically. The numerical range within each factor which is scored is inclusive (for example, "18 to 20 points" means 18, 19, or 20 points).

§52.778 COLOR.

(a) (A) classification. Canned red tart pitted cherries that have a good color may be given a score of 18 to 20 points. "Good color" means a practically uniform color that is bright and typical of canned red tart pitted cherries which have been prepared and processed from properly ripened cherries.

- (b) (B) classification. Canned red tart pitted cherries that have a reasonably good color may be given a score of 16 or 17 points. "Reasonably good color" means a reasonably uniform color, typical of canned red tart pitted cherries which have been properly prepared and processed and which color may range from a slight yellowish-red color to a slightly mottled reddish brown.
- (c) (C) classification. Canned red tart pitted cherries that have a fairly good color may be given a score of 14 or 15 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). "Fairly good color" means a fairly uniform color typical of canned red tart pitted cherries which have been properly processed and which color may range from a brownish cast to mottled shades of brown.
- (d) (SStd.) classification. Canned red tart pitted cherries that fail to meet the color requirements for U.S. Grade C may be given a score of 0 to 15 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.779 FREEDOM FROM PITS.

- (a) *General*. The factor of freedom from pits refers to the incidence of pits and pit fragments.
- (b) Definitions. (1) A "pit", for the purposes of the allowances in this section, is a whole cherry pit or portions of pits computed as follows:
- (i) A single piece of pit shell, whether or not within or attached to a whole cherry, that is larger than one-half pit shell is considered as one pit;
- (ii) A single piece of pit shell, whether or not within or attached to a whole cherry, that is not larger than one-half pit shell is considered as one-half pit;
- (iii) Pieces of pit shell, within or attached to a whole cherry, when their combined size is larger than one-half pit shell are considered as one pit; and
- (iv) Pieces of pit shell, within or attached to a whole cherry when their combined size is not larger than one-half pit shell are considered as one-half pit.

- (2) "Drained cherries" means pitted cherries that have been drained of packing medium by the method prescribed in this subpart.
- (c) (A) classification. Canned red tart pitted cherries that are practically free from pits may be given a score of 18 to 20 points. "Practically free from pits" means that the number of pits that may be present in the drained cherries does not exceed the allowances for this classification as set forth in Table IV.
- (d) (B) classification. Canned red tart pitted cherries that are reasonably free from pits may be given a score of 16 or 17 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). "Reasonably free from pits" means that the number of pits that may be present does not exceed the allowances for this classification as set forth in Table IV.
- (e) (C) classification. Canned red tart pitted cherries that are fairly free from pits may be given a score of 14 or 15 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). "Fairly free from pits" means that the number of pits that may be present in the drained cherries does not exceed the allowances for this classificaas set forth in Table IV.
- (f) (SStd.) classification. Canned red tart pitted cherries that fail to meet the requirements of U.S. Grade C may be given a score of 0 to 13 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52.780 DEFECTS.

- (a) *General*. The factor of defects refers to the degree of freedom from harmless extraneous material, mutilated cherries, and cherries blemished by scab, hail injury, discoloration, scar tissue, or by other means.
- (1) "Cherry" means a whole cherry, whether or not pitted, or portions of such cherries which in the aggregate approximate the average size of the cherries.
- (2) "Harmless extraneous material" means any vegetable substance (including, but not being limited to, a leaf or a stem, and any portions thereof) that is harmless.

- (3) "Mutilated cherry" means a cherry that is so pitter-torn or damaged by other means that the entire pit cavity is exposed and the appearance of the cherry is seriously affected.
- (4) "Minor blemished cherry" means any cherry blemished with skin discoloration (other than scald) having an aggregate area of a circle 9/32 inch (7 mm) or less in diameter which more than slightly affects the appearance of the cherry but does not extend into the fruit tissue.
- (5) "Blemished cherry" means any cherry blemished by skin discoloration (other then scald) which in the aggregate exceeds the area of a circle 9/32 inch (7 mm) in diameter. A cherry affected by skin discoloration extending into the fruit tissue or by scab, hail injury, scar tissue, or other abnormality, regardless of size, is considered a blemished cherry.
- (b) (A) classification. Canned red tart pitted cherries that are practically free from defects may be given a score of 27 to 30 points. "Practically free from defects" means that the number of defects that may be present does not exceed the number specified for the type of defects in Table IV.
- (c) (B) classification. Canned red tart pitted cherries that are reasonably free from defects may be given a score of 24 to 26 points. Canned red tart pitted cherries that fall into this classification may not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). "Reasonably free from defects" means that the number of defects that may be present does not exceed the number specified for the type of defects in Table IV.
- (d) (C) classification. If the canned red tart pitted cherries are fairly free from defects, a score of 21 to 23 points may be given. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). "Fairly free from defects" means that the number of defects that may be present does not exceed the number specified for the type of defects in Table IV.
- (e) (SStd.) classification. Canned red tart pitted cherries that fail to meet the requirements for Grade C for any reason may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52,781 CHARACTER.

- (a) *General*. The factor of character refers to the physical characteristics of the flesh of the cherries.
- (b) (A) classification. Canned red tart pitted cherries that have a good character may be given a score of 27 to 30 points. "Good character" means that the cherries are thick-fleshed and have a firm, tender texture.
- (c) (B) classification. Canned red tart pitted cherries that have a reasonably good character may be given a score of 24 to 26 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade B, regardless of the total score for the product (this is a limiting rule). "Reasonably good character" means that the cherries may be reasonably thickfleshed and may be slightly soft.
- (d) (C) classification. Canned red tart pitted cherries that have a fairly good character may be given a score of 21 to 23 points. Canned red tart pitted cherries that fall into this classification shall not be graded above U.S. Grade C, regardless of the total score for the product (this is a limiting rule). "Fairly good character" means that the cherries may be thin-fleshed, and may be soft but not mushy, or slightly tough but not leathery.
- (e) (SStd.) classification. Canned red tart pitted cherries that fail to meet the requirements for U.S. Grade C may be given a score of 0 to 20 points and shall not be graded above Substandard, regardless of the total score for the product (this is a limiting rule).

§52,782 ALLOWANCES FOR QUALITY FACTORS.

 $\begin{tabular}{ll} TABLE & IV \\ \\ Allowances & for Quality Factors \\ \end{tabular}$

Factor	Sample Unit		Maximum number permissible for the respective grade						
	Size	A		F	3	С			
PITS	20 ozs.	Not more than 2 in any sample unit	Sample average 1 per 40 ozs.	Not more than 3 in any sample unit	Sample average 1 per 30 ozs.	4 or more in any sample unit	Sample average 1 per 20 oza.		
DEFECTS Total-mutilated, + minor blem- ished, + blem- ished of which Blemished -	100 cherries	10		15		20			
limited to		3	i	7		15			
Harmless extraneous material	Total Contents			Average 1.5 60 ozs. net		Average 3 pieces per 60 ozs. net contents			

§52.783 ASCERTAINING THE GRADE OF A LOT.

The grade of a lot of canned red tart pitted cherries covered by these standards is determined by the procedures set forth in the Regulations Governing Inspection and Certification of Processed Fruits and Vegetables, Processed Products Thereof, and Certain Other Processed Food Products (§§52.1 to 52.83).

SCORE SHEET

\$52.784 SCORE SHEET FOR CANNED RED TART PITTED CHERRIES.

Size and kind of container							
FACTOR SCORE POINTS							
Color	20	(A) $18 - 20$ (B) $16 - 17$ (C) $14 - 15$ $\underline{2}/$ (SStd.) $0 - 13$ $\underline{2}/$					
Freedom from pits	20	(A) $18 - 20$ (B) $16 - 17$ $2/$ (C) $14 - 15$ $2/$ (SStd.) $0 - 13$ $2/$					
Freedom from defects	30	(A) $27 - 30$ (B) $24 - 26$ $\underline{2}/$ (C) $21 - 23$ $\underline{2}/$ (SStd.) $0 - 20$ $\underline{2}/$					
Character	30	(A) $27 - 30$ (B) $24 - 26$ $\underline{2}/$ (C) $21 - 23$ $\underline{2}/$ (SStd.) $0 - 20$ $\underline{2}/$					
Total score	100						
Normal flavor							
Grade							

 $[\]underline{1}/$ See size limitation for U.S. Grade A and U.S. Grade B.

 $[\]underline{2}/$ Indicates limiting rule.

The U.S. Standards for Grades of Canned Red Tart Pitted Cherries, as herein revised, shall become effective May 15, 1974, and thereupon will supersede the U.S. Standards for Grades of Canned Red Tart Pitted Cherries which have been in effect since June 16, 1972.

Dated: April 12, 1974

E. L. Peterson Administrator Agricultural Marketing Service

Published in the Federal Register of May 17, 1972 (37 F.R. 9755).

Amended effective June 16, 1972 (37 F.R. 9755).

Revised effective May 15, 1974 (39 F.R. 13962).



